

REMARKS

Applicant has amended claims 1, 4 and 5. Claims 1 – 14 are pending in the application. This amendment contains no new matter. Entry of this amendment is respectfully requested.

Claim objections

Applicant has amended claims 4 and 5 as suggested by the Examiner. Claims 4 and 5 are dependent on amended claim 1 and should now be in form for allowance for the reasons set forth below.

Allowable Subject Matter

Applicants would like to thank the examiner for indicating that claims 2 – 14 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Applicants have amended claim 1 and believe that amended claim 1 is allowable for the reasons set forth below. Accordingly, Applicants believe that 2 – 14 are now in form for allowance.

Telephone Interview with Examiner Hess

The undersigned wishes to thank Examiner Hess for returning my call on June 14, 2005 and sending me a copy of the Examiner's marked up copy of the cover page of Kroeze US Pat. No. 3,938,674 on June 15, 2005 which was inadvertently omitted from the Office action mailed March 21, 2005.

Claim Rejections – 35 USC § 102

Claim 1 was rejected by the Examiner under 35 U.S.C. 102 (b) as being anticipated by Kroeze et al. (US Pat. No. 3,938,674).

Examiner Hess indicates on the marked up cover sheet of Kroeze et al. that cylinder **27c** is a "redundant means" and that a piston **27a** which moves up and down as shown by a double arrow is connected to conveyor **B** and cylinder **27c**. The Examiner also notes that table **12** is a "receiving means".

Applicants have carefully reviewed Kroeze et al. and the marked up copy of the Kroeze et al cover sheet and respectfully submit that Kroeze et al (US Pat. No. 3,938,674 does not anticipate Applicants amended claim 1 under 35 USC § 102(b) for the reasons set forth below.

The Kroeze cylinder **27c** and attached piston **27a** appear to be only a single

cylinder and a single piston. A careful reading of the patent at column 5 lines 38 – 57 is indeed ambiguous but it does, however, appear to indicate that cylinder 27c is really a pair of cylinders on opposite sides of the conveyor B.

If cylinder 27c is a pair of cylinders, that fact alone does not make the cylinders “redundant” in the sense that if one fails, the other cylinder and piston 27a will prevent conveyor B from falling or lowering. A careful search of Kroeze fails to disclose a system for locking or preventing hydraulic fluid from leaving the matching cylinder 27c if it should fail. Thus a failure of one Kroeze cylinder 27c apparently results in the failure of the matching cylinder 27c and the conveyor B will drop or come down due to gravitational forces in an uncontrolled manner.

Claim 1b amended of the present invention calls for “redundant means 10 for selectively preventing a decrease in said variable pinch point 9 to reduce the chance of an operator 30 being hurt.”

Applicants in contrast to Kroeze, in paragraph [0065], call for two hydraulic cylinders 11 and 12, two valves 13, and 14 and a load control system (LCS) system control means 15 as shown in Figures 17, 18, and 20. If one of Applicants’ two hydraulic cylinders or one of the two valves fail, the deck 3 will not fall or descend and decrease the length of the hazardous pinch point 9 which could harm the operator if he is beneath the deck 3.

Operation of the redundant means 10 is carefully explained in paragraph [0067] of Applicants’ specification. Specifically, the redundant hydraulic system of check valves 13 and 14, hydraulic lock valve solenoids 69 and 70 are controlled by load control safety system 15, all part of the redundant means 10, as shown in Figure 20. The redundant means 10 prevents deck 3 from descending in the event of a failure in one of the cylinders 11 or 12. Thus redundant means 10, in Applicants invention, prevents pinch point gap 9 in Figure 8, or pinch point 9’ in Figure 9 from decreasing. A decreasing pinch point can be hazardous to a workman caught in the hazardous pinch point.

In summary, Kroeze et al. does not anticipate applicants redundant means 10 because Kroeze et al. does not teach any redundant means which teaches a system that prevents a conveyor from falling if one or more cylinders or valves fail.

Pinch point

Kroeze U.S. 3,938,674 does not recognize that there is a pinch point anywhere in his machine which would be a danger to operators or other persons. A pinch point as defined by Applicants is considered a hazard when two elements of a machine move rather rapidly toward one another and the pinch point 9 is located where an operator could accidentally be caught in the pinch point.

Examiner Hess has rightly identified the space between table 12 and the downstream end of conveyor **B** as a possible pinch point. Empty table 12 must quickly rise to its upper position to receive sheets from conveyor **B** which have piled up against gate 16 while the full stack on table 12 has been shuttled to a separator station **F**.

It is respectfully submitted, however, that cylinder 27c in Fig. 1 of Kroeze at column 5, line 49 is not part of the Kroeze mechanism which affects the increase or decrease of the pinch point between the downstream end of conveyor **B** and table 12. As stated at column 5, line 51, "The conveyor **B** is pivotally supported on a pivot 29. Pivot 29 is fixed in elevation. When cylinder 27c moves piston bar up and down, only the upstream end of conveyor **B** moves. The downstream end at fixed pivot point 29 does not move. Thus whether cylinder 27c operates properly or fails is immaterial. Operation of cylinder 27c simply has no effect on the pinch point increasing or decreasing between table 12 and the downstream end of conveyor **B**.

For the reasons set forth above, Applicants respectfully submit that Kroeze 3,938,674 should be removed as a teaching reference. Failure of the Kroeze cylinder 27c does not endanger workmen caught between stationary pivot point 29 of the downstream end of conveyor **B** and table 12.

Redundant Means 10 for Selectively Preventing a Decrease in said Variable Pinch Point Gap 9 to Reduce the chances of an operator 30 being hurt.

Claim 1 at paragraph (b) has a further limitation which Applicants respectfully submit distinguishes Applicants' invention over Kroeze et al. 3,938,674.

Claim 1 at paragraph (b) states as follows: "b. redundant means 10 for selectively preventing a decrease in said variable point gap 9 to reduce the chances of an operator being hurt."

Applicants have amended claim 1 by adding the phrase: "to reduce the chances of an operator being hurt". Every machine has "pinch points", but Applicants concern is with pinch points which occur in machinery in which it is necessary for workman to be near the pinch point when they are operating the machine and the hazard cannot be eliminated by fixed screens or other physical barriers. Such is the case in the present application, where workmen must be, at certain times, adjacent to pinch point 9. The operator must be near pinch point 9 to label the stacks or place dunnage sheets on the pallets prior to building stacks 6', 6" as shown in Figure 38. Such work can be done safely only when the deck is going up and the pinch point 9 is increasing. The operator must be out from under the deck 3 when the deck 3 is lowering and the pinch point gap 9 is decreasing.

Paragraphs [0067] and [0068] describe the redundant means 10 for selectively preventing a decrease in the variable pinch point gap 9 to reduce the chances of an

operator **30** being hurt. Redundant means **10** for selectively preventing a decrease in the variable pinch point **9** to reduce the chances of an operator **30** being hurt is shown in Figures 16, 17, and 20.

Specifically, in normal operation of sheet stacker **2** hydraulic fluid flows into hydraulic cylinders **11** and **12** through check valves **13** and **14** and deck **3** moves up; increasing variable pinch point **9**. Check valves **13** and **14** keep the hydraulic fluid from coming back out, thereby preventing deck **3** from coming down and decreasing the variable pinch point gap **9**.

Deck **3** can only be lowered if operator **30** selectively pushes deck down enabled button **71**, as described in paragraph [0068]. Button **71** may be mounted on a fixed or movable console such as the control means **35** shown in Fig. 35. The location of the control means **35** preferably is located safely away from pinch point gap **9** and with a clear view of the pinch point gap **9** so that operator **30** may determine that no person is near pinch point gap **9**. When the operator **30** sees that no one is close to hazardous pinch point **9**, as shown e.g. in Figure 35, he pushes deck down enabled button **71** and operates the load change safety system including redundant means **10** described in paragraphs [0067] and [0068] and schematically shown in Figure 20.

Specifically, pushing deck down enabled button **71** energizes hydraulic lock valve solenoids **69** and **70** thereby letting hydraulic fluid out of hydraulic cylinders **11** and **12** through ports **66** and permits deck **3** to safely descend and pinch point gap **9** to decrease. As described in paragraph [0082], in the basic form of the invention described in claim 1, the operator must keep button **71** depressed to keep the stacker descending and the pinch point gap **9** decreasing. If the operator **30** sees another person approaching the hazardous pinch point gap **30**, he may selectively remove his finger from button **71** and the deck **3** will immediately stop its descent and prevent the hazardous pinch point gap **9** from decreasing.

Applicants' redundant means **10** also prevents operator **30** from being hurt by accidentally being caught in pinch point **9**. The instant operator **30** inadvertently takes his finger off button **71** and leaves his safe position, the deck ceases to descend and redundant means **10** prevents the deck **3** from coming down and injuring the operator **30** should he accidentally come within pinch point gap **9**.

The need for having a redundant means **10** which selectively prevents a decrease in the variable pinch point gap **9** is to permit the operator **30** or any other person to work near the variable pinch point gap **9** to label stacks or set dunnage sheets as mentioned above. The redundant means **10** permits this work to be done while the deck **3** is rising and the variable pinch point gap **9** is increasing. If the operator **30** fails to move away from the variable pinch point gap **9** when the deck **3** is normally programmed to come down, the redundant means **10** will automatically prevent the deck **3** from descending and will remain stationary until the operator **30**

returns to a position safely away from the variable pinch point gap 9 and he pushes button 71.

In summary, it is the operator 30 selectively pushing deck down enabling button 71 which enables redundant means 10 to selectively prevent a decrease in the variable pinch point gap 9 to reduce the chances of an operator 30 being hurt. Stated another way, what Applicants have presented is a system that will let the deck go up (pinch point 9 increases), but will not let it come down, (hazardous pinch point 9 decreases) unless an operator 30 pushes deck down enabling button 71.

In contrast, Kroeze et al. US patent 3,938,674 does not teach or suggest any redundant means for selectively preventing a decrease in a variable pinch point gap to reduce the chances of an operator being hurt.

In fact, Kroeze et al. teaches away from applicants' invention by failing to even identify any part of his machine that might create a hazardous pinch point to operators and other workmen who might approach various hazardous variable pinch points of his machine.

Further Kroeze, et al. does not provide or teach any redundant means for selectively or otherwise, preventing operation of his machine to prevent injury to workmen should they accidentally come within any identified variable pinch point gap.

Conclusion

In view of the above, Applicants submit that claims 1 - 14 remaining in the application are in condition for allowance and allowance of the claims at an early date is solicited.

Please direct any calls in connection with this application to the undersigned at (510) 832-4111.

Date:

July 20, 2005

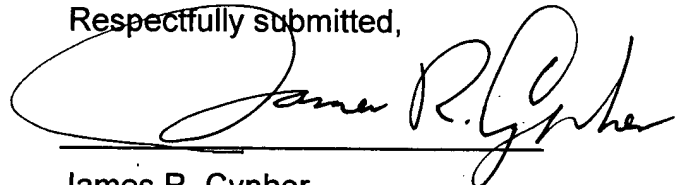
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Respectfully submitted,



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Attachments: Petition for One Month Extension of Time & Check for extension fee